DOCUMENT RESUME

ED 452 608 EA 030 999

AUTHOR Wallace, Mike
TITLE School Renewal on a Grand Scale: Managing Complex Initiatives To Restructure Local Provision of Schooling in England.
PUB DATE 2001-04-00
NOTE 20p.; Paper presented at the Annual Meeting of the American Educational Research Association (Seattle, WA, April 10-14, 2001).
PUB TYPE Information Analyses (070) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Case Studies; *Decentralization; *Educational Change; Educational Finance; *Educational Objectives; *Educational Policy; Elementary Secondary Education; Foreign Countries; *Organizational Development; School Culture
IDENTIFIERS *England

ABSTRACT

Strategies for initiating and sustaining complex education change, as reported in this paper, entail coordinated interaction across administrative levels of public education systems. Efforts to change schooling in England have included initiatives to downsize and reconfigure the provision of state-funded education. These efforts have created conditions for school renewal--promoting improvement in the quality of education offered in the smaller number of formally restructured institutions that survive. Large-scale local initiatives to reorganize schools provide a set of characteristics of complex educational change and change-management themes. This study hypothesizes that these characteristics are not confined to the specific complex change that restructuring schools represent through a major reorganization exercise. The study reported here was designed as a first step toward filling a gap in research-backed practical guidance that addresses the increasing complexity of educational change. A pilot study for the present research indicated that managing such a change could be highly problematic, not only because of difficulties with cross-level communication, but also due to the unintended inhibitory effect of diverse central government policies. Patterns in the complexity of educational change are revealed by analysis of the data on local education authorities' reorganization initiatives and their management implications. The analysis indicates how patterns were detectable in the complexity of the reorganization initiatives and the school-renewal efforts that flowed from them, providing practical implications for managers. (Contains 19 references.) (DFR)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 452 608

School Renewal on a Grand Scale: Managing Complex Initiatives to Restructure Local Provision of Schooling in England

Mike Wallace

Department of Education
Bath
BA2 7AY
UK

email: a.m.wallace@bath.ac.uk

Paper presented at the Annual Meeting of the American Educational Research Association, Seattle, 10th-14th April 2001

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

M. Wallace

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

EA 030999

Restructuring for School Renewal through Large-Scale Reorganisation

The purpose of this paper is to contribute to our understanding of strategies for instigating and sustaining complex educational change entailing coordinated interaction across administrative levels of public education systems. Such multilevel change efforts in England have included initiatives to downsize and reconfigure the provision of state funded education in schools. They have at the same time created conditions for school renewal: promoting improvement in the quality of education offered in the smaller number of formally restructured institutions that survive.

The dataset created through my research into large-scale local initiatives to reorganise schools in this way forms a basis for inductive elaboration of a general typology of characteristics of complex educational change and change management themes expressed in the initiatives. It is hypothesised that these characteristics are not confined to the specific complex change that restructuring schools through a major reorganisation exercise represents. The practical implications of the characteristics identified for managing change may be applicable in some degree to other educational changes. Complex educational change is now commonplace in many western countries including the USA where there is wide ranging educational reform. Indeed, the increasing complexity of educational change may be a global phenomenon. Some 95 per cent of democratically governed countries now have elected regional or local governments (World Bank 2000), many of which contribute to the formulation and implementation of state education policies and the changes for practice that flow from them. Devolution brings greater managerial complexity where changes span multiple levels of government and administration of state funded education.

There is a dearth of research-backed practical guidance that addresses squarely the increasing complexity of educational change. Fullan (1993), one of the first commentators to acknowledge its growing complexity, proposed that a new paradigm for understanding educational change is needed that embraces its 'dynamic complexity'. Yet the paucity of related research means that prescriptions for practice contained in the small amount of guidance that does acknowledge such complexity (eg Fullan 1993, 1999) are more hypothetical than empirically grounded.

In the spirit of Fullan's call for a new paradigm, the present study was designed as a first step towards filling this gap in our research knowledge through an in-depth investigation of what was conceived as an instance of complex educational change. Characteristics of its complexity with management implications would be identified as a foundation for future research determining the extent of their wider applicability. Second, although a significant number of initiatives undertaken in local education authorities (LEAs – equivalent to large school districts in the USA) to restructure and improve local provision of schooling had been launched in England, minimal research had been carried out on them. An earlier study of the management of multiple innovations in schools (Wallace 1991a, 1991b) had highlighted how disjunction between activities at different education system levels could ensue because of limited communication between them. A pilot study for the present research (Wallace 1996a, 1996b) also indicated that managing such a change could be highly problematic not only because of difficulties with cross-level communication but also due to the unintended

inhibitory effect of diverse central government policies, several of which had not been designed to impinge on reorganisation.

The thrust of LEA reorganisation initiatives was to reduce the substantial surplus student capacity in the schools within LEA jurisdiction (which may number several hundred) resulting from a nationwide downturn in the school-age population over the previous decade and a half. They typically entailed closing or merging some schools, changing the age when pupils transferred between institutions, contracting schools by removing temporary classrooms, and expanding other schools. The outcome was streamlined provision in fewer schools with a low proportion of surplus student places.

The pattern of governance for the large majority of publicly funded schools determined the involvement of stakeholders at each administrative level in reorganisation of local provision. The English education system consists of three main administrative levels. At the time of the research, the division of responsibilities was as follows:

- *central government* - ministers from the elected majority political party regulated the nature, overall resourcing and governance of the national system of schooling. They could employ legislation and resource incentives or penalties to persuade LEA officials and local government councillors to remove surplus student places in their schools;
- *local government* - elected councillors in the majority political party in each locality were responsible for local taxation which part-funds schooling and for their LEA. Most LEAs contain between one and three hundred primary (elementary) and secondary or high schools. Local government councillors had a duty to regulate the supply of student places, which included taking reorganisation initiatives if deemed necessary. Officials, led by the chief education officer, were professionals who carried out the executive tasks of local government on behalf of councillors;
- *school* - elected or co-opted members of the governing body for each school represented parents, the local community, the LEA and school staff. (Governing bodies approximate to school boards in the USA but there is a separate governing body for each school.) Governors' responsibilities included appointing staff within an annual budget covering their salaries, devolved from the LEA according to central government parameters. Headteachers (principals) attended governors' meetings and could decide whether to accept governor status and so entitlement to vote on governing body decisions. They were responsible for day-to-day school management within the oversight of the governing body.

The nature and scope of LEA officials' tasks in managing reorganisation initiatives on such a grand scale therefore derived from their location at the intermediate administrative level of the national education system. Yet the sites of implementation of reorganisation were their schools at the peripheral level. Equivalent tasks for headteachers and their senior staff colleagues were affected by their location, as they were faced with managing externally imposed reorganisation of their own institution in the context of their other work.

The stimulus for LEA initiatives lay primarily with central government. They were typically instigated in response to mounting central government pressure on officials and councillors to remove surplus student capacity so as to lower, in turn, the local tax burden incurred in maintaining under-used school buildings. According to a central government estimate, the number of surplus places across England had reached 1.5 million by the early 1990s (DES 1992). It was generated by a nationwide decline in the birth rate since the 1970s and by local

demographic changes such as population drift away from rural areas. Reorganisation tends to be unpopular with parents and staff in schools who become aware of what they stand to lose from it long before they experience what they might gain. Many councillors, mindful of the risk that a disliked policy might cost them precious votes among parents of school age children, had been unwilling to tackle the mounting surplus.

By this time, ministers in the past Conservative central government, like their counterparts in other countries including the USA (Osborne and Gaebler 1992), had embarked on a raft of policies to reduce burgeoning expenditure in the public sector through attempts to increase the efficiency of service provision. Central government ministers eventually gave themselves powers to intervene if LEA officials and councillors whose schools had a substantial proportion of surplus places did not undertake reorganisation initiatives of their own (DFE 1994). Accompanying this threat was a central government incentive for LEAs: a related policy enabled them to borrow capital from the centre at an advantageous rate of interest specifically for school building and refurbishment connected with reorganisation. The more places removed, the more capital borrowing allowed.

Officials, however, also capitalised on the opportunity these economically driven initiatives presented to promote wide ranging school renewal in terms of educational quality (Wallace and Pocklington 1998). They sought to improve buildings and facilities in the schools that remained open, to retrain school staff (faculty) redeployed from closed or merged institutions, and to build on the fresh start where staff from different schools were brought together in restructured institutions by encouraging and supporting their coherent and lasting improvement efforts.

The remainder of the paper examines patterns in the complexity of educational change revealed by analysis of the data on LEA reorganisation initiatives and their management implications. First, the research design and methods are described. Second, a conceptual framework for analysing the nature and process of complex educational change is put forward. It is based on Fullan's (1991) classification of generic stages through which single innovations may pass and on the typology of characteristics of complexity generated from the data. Third, examples are offered as to how these characteristics and their constituents were expressed and affected management strategies during the LEA reorganisation initiatives. Fourth, change management themes are identified and the indicative impact of characteristics of complexity on them is illustrated. Finally, the importance is underlined of developing empirically based practical guidance that addresses the level of complexity experienced by those who have to manage complex educational change.

Research Design and Methods

The Economic and Social Research Council (the British government research funding agency whose remit includes education) sponsored this project from January 1996 to September 1998. Methods of investigation were qualitative, informed by techniques of data analysis developed by Miles and Huberman (1994). Access was negotiated to investigate two major reorganisation initiatives already under way in an urban borough LEA and a predominantly rural county LEA (Table 1). Both LEAs contained a mixture of school systems: a three-tier first-middle-high school system in some areas and a two-tier primary-secondary school system in others. Reorganisation proposals included reverting to a primary-secondary school system throughout each LEA, leading to the closure of many middle schools.

Table 1: The LEA contexts

Factor	*Borough LEA*	*County LEA*
demography	compact industrialised area containing a large town, suburbs and a surrounding rural district	large area containing several market towns and a rural 'commuter belt' district
number of LEA schools before and after reorganisation	160→129	274→227
number of surplus student places before and after reorganisation	15,000→7,500	19,000→13,300
surplus student places as percentage of schools' capacity before and after reorganisation	25%→12.5%	19%→13.3%

Focused, interpretive case studies (Merriam 1988) were carried out during 1996 and 1997 of both the LEA initiatives and eighteen of their schools, most of which faced radical changes such as merger or major expansion. Implementation of the final phase of the initiative in one LEA was completed in September 1996, data being collected in the term before reorganisation and for over a year afterwards. Implementation of the final phase of the initiative in the other LEA was completed in September 1997, data being gathered for over a year before the reorganisation date and in the succeeding term. The number of case study schools reduced to ten from the date of reorganisation when mergers and site closures took place.

Semi-structured interviews and document survey concentrated, contemporaneously, on tasks of managing the implementation of approved reorganisation proposals and managing schools surviving reorganisation. There was also a retrospective focus on the management tasks of those responsible for developing LEA proposals and interaction between groups with an interest in the content of proposals and outcomes of consultation. Supplementary interviews gathered contextual information from headteachers of expanding or closing schools in the same set of proposals as the case study schools in the borough LEA, and the headteacher and other senior staff in an expanding secondary school in the county LEA. Interviews with central government civil servants elicited, retrospectively, information on liaising with LEA officials and assessing firm proposals for reorganisation of schools. Altogether, 325 interviews were conducted with 188 respondents: three quarters with school staff and governors; a fifth with LEA officials and councillors; and the rest with central government civil servants. Research questions were derived from a literature review and the pilot study. Semi-structured interviews were taped and field notes taken. Interview summaries fed into site summaries as the basis for cross-site analysis, data being displayed as matrices. The dataset was scanned for broad themes and to explore the contextual detail of particular interactions.

The case study schools and their fate under reorganisation are summarised in Tables 2 and 3. A contradictory central government policy was designed to encourage members of school communities to opt out of LEA control, their school becoming funded directly through central government. Two case study schools in the county LEA escaped merger through this route.

Table 2: The borough LEA case study schools and reorganisation arrangements

School	*Reorganisation arrangements*
13-18 high, split site 9-13 middle	one existing high school site closed. The high school expanded to become an 11-18 secondary school by receiving 11-13 year old students from four closing middle schools. The site of one middle school became the 11-14 site of the secondary school
4-9 first 9-13 middle	schools merged on the middle school site to create a new 4-11 primary school. 11-13 year old students transferred to the secondary school. Disposal of the ex-first school site

(Note: Reorganisation took place over two years, completed in 1997)

Table 3: The county LEA case study schools and reorganisation arrangements

School	*Reorganisation arrangements*
4-8 first 4-8 first 4-8 first 8-12 middle	schools merged on the middle school site to form a new 4-11 primary school, using one ex-first school site as an annexe. Disposal of the other two sites
4-8 first 8-12 middle	LEA merger proposal led to a successful application for the first school to escape from LEA control, becoming funded directly by central government as a 4-7 infant school. The middle school became a 7-11 junior school
4-8 first 4-8 first	schools merged on one ex-first school site to form a new 4-11 primary school. Disposal of the other site
4-8 first 4-8 first	schools merged on a new site to form a 4-11 primary school. Disposal of one ex-first school site. The other ex-first school escaped merger by becoming a private school
4-11 primary 4-11 primary	schools merged on one ex-primary school site to form a new 4-11 primary school. Disposal of the other site
4-11 primary 4-11 primary	LEA merger proposal led to successful application for one primary school to escape from LEA control, becoming funded directly by central government. The other primary school remained unchanged

(Note: reorganisation took place in one year, with transfer of all students in 1996)

Stages and Phases of Reorganisation

The slogan that 'change is a process, not an event' (Fullan 1991: 49) sums up the lessons of North American research into the fate of single innovations. Fullan divides this process into a sequence that I will term *stages* (to distinguish them from the sequential *phases* of the reorganisation initiatives). *Initiation* is the first stage of the process leading to a decision to proceed with a change. From then, the *implementation* stage covers the experience of attempting to put the change into effect. Finally, the *institutionalisation* stage refers to the way the change becomes built into normal practice and is no longer perceived as anything

new. Other outcomes are possible, not least that the implementation effort may be abandoned. While one stage follows another, the process is not neatly linear, nor is one stage always totally distinct from the next. It happens that each stage of the LEA reorganisation initiatives relating to schools in a given phase was sharply delineated. National legislation governing the procedure for approval of proposals to reorganise schools, together with the requirement that reorganisation must come into effect on a specified date, meant that reorganisation in each phase actually consisted of processes punctuated by occasional events (Figure 1).

Figure 1: The critical path followed by stages of reorganisation

initiation stage

- getting started on the first initiation stage (process)
- developing formative LEA proposals (process)
- publishing these proposals locally (event)
- consulting on formative proposals and subsequent revision (process)
- submission of firm proposals to central government ministers for approval (event)
- central government assessment of LEA proposals (process)
- preparing for implementation (process)
- central government decision and announcement (event)

implementation stage

- making preparations necessary for approved proposals to be put into effect on the scheduled reorganisation date (process)
- preparing for institutionalisation after the reorganisation date (process)
- formal completion of reorganisation on this date (event)

institutionalisation stage

- establishing normal operation in reorganised schools (process)
- subsequent development in schools emerging from reorganisation (process)

The CEO and other senior LEA officials were centrally involved in getting started on the first *initiation* stage. They gathered the support of councillors and representatives of other stakeholder groups such as teacher unions, articulating a vision of reorganisation as an opportunity to improve educational provision. They advocated that the first-middle-high school system be abolished because the age of student transfer between schools did not align with central government reform of the curriculum, whereas the old primary-secondary system would do so. Closures and mergers in first, middle and primary schools would take out some surplus places, while others existing in high schools could be removed in effect by them becoming secondary schools, taking in younger students currently in middle schools. Officials worked to create a 'climate for change' in which this vision became accepted (see Wallace 2000). They drew up reorganisation plans. In the borough LEA it was for five sequential annual phases. In the county, officials first consulted parents and staff in schools about the principle of reorganisation, then planned a 'pilot' first phase in one area. The second phase was subsequently planned for two years later but delayed and incorporated with the third phase three years on from the pilot.

In the first and subsequent initiation stages for each phase of reorganisation, officials went through the process of drafting formative proposals for reorganising schools that were then published – a big event for other stakeholders at school level, where they learned what

reorganisation potentially held in store for their school. The content of proposals varied widely. At one extreme, it might be simply to remove a temporary classroom at a small rural primary school to take out surplus capacity. At the other extreme was the proposal for the case study high school in the borough LEA (with 1,500 students aged 13-18), which included a subsidiary site a short distance away from the main site. It was to expand to become a split-site secondary school (for 2,100 students aged 11-18). The 11-14 year old students would be taught at a new lower school site, created out of a closing middle school two and half miles away from the main site. The old subsidiary site would be closed and students aged 14-18 would be taught at the main site. Extensive building on both sites included a new sports hall and 17 room classroom block on the lower school site, a new examination hall and 17 room classroom block on the main site, and refurbishment of science and technology laboratories and offices for administrators on both sites.

Officials consulted stakeholders in each community, a process involving many meetings across the LEA, culminating in the event of formal submission of revised, firm proposals to central government for approval. The proposal assessment process conducted by civil servants culminated in a minister with responsibility for state schools deciding whether to approve each proposal. This event marked the end of the initiation stage. The decision to instigate the reorganisation initiatives was therefore taken at LEA level, with central government prompting, but the decision whether firm proposals could be implemented was beyond LEA control. After announcing decisions, there was virtually no further central government involvement apart from liaising with officials over borrowing of capital for building work.

The *implementation* stage involved LEA officials, headteachers and governors orchestrating the process of making arrangements for proposals winning central government approval to be put into place in schools. They had to be completed by a date at the beginning of a school year, an immutable event imposing great pressure for the 'critical path' of implementation activities to be completed in time. A potentially contentious LEA task was to orchestrate the redeployment, premature retirement or compulsory redundancy (termination of employment) of displaced staff from closing or merging schools. Other key tasks to create conditions for school renewal were to provide training and other forms of support for displaced staff to help them prepare for redeployment to another school, to complete any new building or refurbishment embodied in proposals (entailing liaison with civil servants to borrow capital to fund the building work) and to redistribute furniture and equipment from closing institutions to those that would survive. Whereas officials were concerned with preparation across all schools in any phase of reorganisation, school staff and governors were concerned solely with their own institution. Their tasks in part dovetailed with those of officials, but extended to preparing for operation after reorganisation. They might include planning and resourcing the curriculum, making arrangements for pastoral care of students and devising a timetable for use of specialist facilities.

The *institutionalisation* stage was a process of indeterminate length over several years after the official reorganisation date while staff and governors in reorganised schools became accustomed to operating under the new regime. Immediately after reorganisation the top priority for staff was to make a new start so that the reorganised institution could operate normally, which might include coping with unfinished implementation tasks (mainly delayed building and refurbishment work), unpacking furniture and setting up classrooms, establishing routine procedures such as arrangements for movement of students between lessons and developing the curriculum.

In legal terms, reorganisation was an overnight event. Renewal, though, was a long-term and gradual process. As the change wrought by reorganisation became assimilated, staff attention turned to more long-term improvement activity as new central government reform policies were introduced. LEA provision of training and other support for improving practice in reorganised schools continued to be available throughout this time, but headteachers and their senior staff colleagues were solely responsible for orchestrating the institutionalisation stage. Headteachers played a key part in leading school improvement activity to turn externally mandated restructuring into internal school renewal. The process of renewal was very gradual, especially where staff had been brought together from schools with different traditions. It involved establishing professional relationships, consistent working practices and a shared culture and identity among staff drawn from different institutions. While headteachers could create conditions favouring cultural cohesion, they could not directly bring about change in the (often disparate) beliefs and values that staff brought to merged institutions. Nor could they directly control factors like staff turnover and the scope and pace of ongoing central government reforms that brought further change for which reorganisation was now merely the context.

Many quite specific sub-innovations were undertaken at school level within the reorganisation process. They followed the same sequence of stages as reorganisation as a whole, but not necessarily coinciding with the stage reorganisation had reached. The implementation stage spawned the initiation of many sub-innovations, such as extension of the curriculum to cover a new age range of students. They were not implemented until the institutionalisation stage of reorganisation.

Complexity of Change

The degree of complexity of educational change impacts on the stages of the change process. A dictionary definition of the adjective 'complex' is: 'composed of more than one, or of many parts; not simple or straightforward; intricate; difficult' (Chambers 1998: 336). The overarching feature of complex educational change lies in its duality as a single entity - the change itself (like reorganisation of schooling), and as a set of constituent parts (such as division of reorganisation into sequential phases according to the administrative area of the LEA).

It is obvious that there can be no clear-cut distinction between simple and complex educational changes. They may be more usefully conceived as ranging along a continuum from the relatively simple, as in teachers' routine experience of receiving a new class of students, to the highly complex. As the complexity of educational change increases, so does the range of its constituent parts and the amount of interaction between them. Complex educational changes vary. Some parts may be more or less universal, like the significance of forms of interaction other than face-to-face. Others may be particular to the content and context of the change at hand. So although it is impossible precisely to specify the parts whose combined contribution makes up the complexity of all complex educational changes, it is plausible to identify key characteristics, some or all of which may be generic or at least have applicability between changes and between contexts.

Understanding large-scale reorganisation of schooling as an instance of complex educational change implies consideration of such patterns amongst the myriad interactions within and between administrative levels of the education system that this change embodies, together

with the contexts in which these interactions were embedded. A hierarchically ordered typology of characteristics derived from the data is summarised in Figure 2.

Figure 2: Characteristics of complex educational change with management implications

1. **Large-Scale**
   - a multitude of stakeholders with an extensive range of specialist knowledge and priorities
   - the allegiance of stakeholders to partially incompatible beliefs and values, within limits
2. **Componential**
   - a diversity of sequential and overlapping components affecting different stakeholders at particular times
   - a multiplicity of differentiated but interrelated management tasks
3. **Systemic**
   - a multidirectional flow of direct and mediated interaction within and between system levels
   - an unequal distribution of power between stakeholders within and between system levels who are nevertheless interdependent
   - the centrality of cross-level management tasks
4. **Differentially Impacting**
   - a variable shift in practice and learning required
   - variable congruence with perceived interests and associated emotive force, altering with time
   - a variable reciprocal effect on other ongoing activities
   - variable awareness of totality beyond those parts of immediate concern
5. **Contextually Dependent**
   - interaction with an evolving profile of other planned and unplanned changes
   - impact of the accretion of past changes affecting resource parameters

There are five overarching characteristics, each subdivided into more detailed constituents. While they may be distinguished analytically, they do not have independent existence empirically. Rather, each relates to others; all may be expressed differently. Their interrelationship and expression may vary with the evolution of their impact on stakeholders within and between stages of the change process. It seems probable that the more complex an educational change, the more likely it will feature the five core characteristics in combination. On the other hand, there may be value in viewing a change as complex even if not all characteristics are present. Complexity may surely be regarded most fruitfully as a matter of degree, not an all-or-nothing feature of educational change.

Expression of Characteristics of Complexity within the Reorganisation Initiatives

First, complex educational change is typically *large-scale*, impinging on the lives of many people. As members of a pluralist society, they are likely not only to have some stake in the content of the change but also to perceive it differently according to their varying circumstances. A *multitude of stakeholders with an extensive range of specialist knowledge and priorities* will probably be involved or affected, by design. The LEA reorganisation initiatives each necessitated changes in the work and career of thousands of school staff

across more than a hundred schools and in educational provision for many more parents and students. These people were bound to possess very different first-hand knowledge, expertise and priorities relating to reorganisation, depending on their work responsibility or community location, what they wanted out of reorganisation or what they wanted to protect. Parents were concerned that educational provision would continue to be available nearby whose quality, according to their values, was at least as high as at present. Officials wished to win wide acceptance for their proposals. Civil servants were exercised with financial implications of building work connected with proposals. Priorities might shift. During the initiation stage many school staff from schools due to close or merge under LEA proposals were worried whether they might lose their job. Once proposals were approved, they were concerned during the implementation stage with preparing for closure or merger, gaining redeployment in another school or seeking premature retirement. By the institutionalisation stage after reorganisation, the priority of those who succeeded in being redeployed was to accommodate to their new situation, including their new colleagues.

The large number of stakeholders will probably hold *allegiance to a plurality of partially incompatible beliefs and values, within limits* of assumptions about their entitlement and constraints on alternative courses of action. Officials believed that the proposals they put forward during the initiation stage would retain provision within a reasonable distance from the home of every child of school age. When existing arrangements were threatened by such proposals, many parents and other community members who accorded with the general principle of reorganisation rallied around their shared 'nimbyist' (not in my back yard) belief in protecting the status quo for their children. They voiced their protest at public consultation meetings with officials. Yet none questioned the legitimacy of officials launching the reorganisation initiatives in the first place. Staff in high schools due to expand by taking students from middle schools generally welcomed reorganisation proposals whereas most staff in closing middle schools disapproved.

Second, complex educational change is *componential*, an entity consisting of interrelated and differentiated parts that vary over time. The content of the change is likely to consist of a *diversity of sequential and overlapping components affecting different stakeholders at particular times*, a striking feature of the LEA reorganisation initiatives. It took two or three years from publishing formative proposals at the beginning of the initiation stage to completing implementation, and reorganisation was being institutionalised in reorganised institutions over a year and a half later. The five annual phases of the borough LEA initiative covered 125 schools in all. In the more incrementally developed county LEA initiative the pilot first phase affected 32 schools, the second and third combined concerned some 195. There was a long period of overlap between phases, the first being institutionalised as initiation began for subsequent ones. In the borough, two or more phases of reorganisation were at different stages of the change process over five years. Officials had simultaneously to handle different tasks in the sequence implied by the change process across the various phases, cope with the impact of earlier phases on later ones, and monitor progress with all components. The multiplicity of tasks reached its peak during 1994-95 when Phase 1 schools had been reorganised and were at the institutionalisation stage, and many of their staff still needed LEA support, Phases 2 and 3 were at the implementation stage, so preparatory tasks like redeploying staff and arranging building work were in full swing, while public consultation and preparation for submission of firm proposals were under way for Phases 4 and 5. At any point, stakeholders might be going through contrasting experiences, from closure and the threat of redundancy to expansion and the possibility of personal promotion.

The variety of components, coupled with their cumulative impact over time, will dictate that a *multiplicity of differentiated but interrelated management tasks* must be addressed. Officials had to help draft reorganisation proposals and manage public consultation meetings during the initiation stage, then support preparations for closure and opening during implementation, and monitor the progress of institutionalisation after reorganisation. During the implementation stage headteachers of merging schools had to manage their formal closure, squeezing in reorganisation-related management tasks on top of their full time management and teaching activity. Once a headteacher was appointed as headteacher designate of a merged school, she or he had also to prepare for it to open, then cope with institutionalisation.

Third, complex educational change tends to be *systemic*, taking place across two or more administrative levels of a large education system which both shapes and constrains the ways in which stakeholders interact. A cross-level change process will embody a *multidirectional flow of direct and mediated interaction within and between system levels*. The change process must involve interaction between individuals and groups based at different system levels where a change is initiated either centrally or at an intermediate system level for implementation at the periphery of an education system. Many interactions will take place via intermediaries who interpret the communications of stakeholders based at one level who seek to impact on the actions of those at another level. The flow of interaction directly affecting school mergers began with LEA formative proposals, stimulating intense face-to-face interaction in school communities and repeated exchange between their members and officials. A central government inspector visited the schools and reported back to civil servants. They liaised with LEA officials and received documentation might include responses from school governors. All these stakeholders experienced face-to-face interaction with others based at their system level with whom they were most closely associated. The channels for communication across levels were fewer, greater reliance being placed on electronic means or letters. Participants in many interactions crossing system levels acted on behalf of colleagues based at their level. Officials who fronted public consultation meetings represented senior colleagues responsible for the content of proposals. Much information transmitted from LEA to school level was mediated by LEA specialists. They wrote documents like proposals and newsletters for dissemination. Everyone learned of the decisions taken on behalf of the Secretary of State, but very few people from other system levels had ever met the minister concerned. The information was mediated by civil servants and LEA officials.

Interaction across such an extensive network of stakeholders will almost certainly engender enduring ambiguity due to the generation of unintended consequences of actions. They may be hidden from their perpetrators because they are not party to further interactions among stakeholders elsewhere stimulated by their endeavours. There is a strong propensity for unintended consequences to arise when action at one system level is taken to affect people at another. Nobody at either central government or LEA levels intended that a consequence of their actions would be for one case study school to become a private school, a product of community members' efforts to resist the proposal to merge it with another. There was significant unpredictability about the future path of the reorganisation initiative for much of the time: it was never a foregone conclusion that councillors would support their officials, that ministers' support for LEA proposals would outweigh their concern to enable schools to be removed from LEA control by becoming directly funded by central government, or that all members of school communities would accept proposals without a fight.

There will be an *unequal distribution of power between stakeholders within and between system levels, who are nevertheless interdependent*. The formal powers of stakeholders may differ widely, especially between levels of the education system. Yet none are powerless, and ultimately even the formally most powerful change initiators are constrained by their dependence on the less formally powerful whose cooperation or compliance may be required where they actually implement the change. Members of school communities were consulted about how reorganisation of their schools might be achieved. They were not asked whether they wanted their schools to be reorganised. Senior officials were authorised by councillors to direct their colleagues' contribution to the initiatives. Authority to pressurise LEAs into undertaking reorganisation initiatives and require public consultation on proposals rested with central government. Authority to put pressure on central government rested with its own appointed watchdogs and members of the Treasury. Underlying economic conditions exerted pressure on the entire education system. Yet school staff and governors were not without power. They had recourse to authority over school-level decisions and informal influence in harnessing support for countering proposals. Conversely, ministers relied on LEA officials and school staff to bring about reorganisation.

The *centrality of management tasks across system levels* follows from the aspiration of policy makers at one level to change education practice at another. Most officials were responsible for management tasks requiring action in schools, such as organising movement of furniture from closing to surviving institutions. Central government civil servants and senior LEA officials liaised with each other to ensure that proposals lay inside central government parameters.

Fourth, a complex educational change is *differentially impacting* on people involved or affected, contributing to the diversity of management tasks. There will be a *variable shift in practice and learning required* of different individuals and groups according to the novelty of whatever they have to do. Headteachers of merging schools experienced a steep learning curve in having to make an unprecedented range of preparations during the implementation stage. Redeployed teachers working with a new age group of students during the institutionalisation stage similarly had much to learn. Reorganisation initiatives in the current legislative context were a novel project for many officials. Mounting a campaign to counter LEA proposals was a first-time experience for many community members. People elsewhere faced far less disturbance to their existing practice. Many schools merely gained or lost a year group of students.

Shifts in practice will have *variable congruence with perceived interests and associated emotive force, altering with time*. Officials' interest in promoting LEA-wide reorganisation might or might not coincide with the narrower interest of school staff, governors and parents in protecting the quality of educational provision in their community. During the initiation stage, formative proposals for closure or merger were as widely resisted at school level as those for expansion were accepted. The negative emotive potential of reorganisation hit mainly the officials who had to run contentious public meetings or endure public protest. Whose interests were being served and whose were being challenged could shift, as where revised firm proposals took protesters' concerns into account. School staff rushing to complete implementation tasks on time experienced considerable stress, and the moral of displaced staff remained low until their future was clear. Whereas, for officials, reorganisation was part of their job: a challenging project that did not threaten their livelihood.

The change will have a *variable reciprocal effect on other ongoing activities*. Reorganisation tasks were a minor concern of some officials and school staff while, for others, managing their part of reorganisation consumed most working hours over many months. Equally, headteachers in schools undergoing radical change were hard pressed. During implementation, those in merging schools who were also appointed to lead the merged institution had three jobs: running the school, preparing for formal closure, and preparing to start up the reorganised institution.

There will be *variable awareness of the totality of the change beyond those parts of immediate concern* to particular individuals and groups. Grasp of the change and of its parts are likely to be hierarchically distributed. Breadth of knowledge of reorganisation at central and the intermediate LEA level, marked by superficial awareness of community circumstances, contrasted with depth of knowledge of the local scene at the peripheral level, with only superficial awareness of the totality. Senior LEA officials had an overview of the entire reorganisation initiative, though they were shorter on appreciation of the impact of their efforts on particular schools and communities than people based at this level. Central government civil servants had an overview of firm proposals and documented responses from school level, but most had never been inside any of the schools. Most school staff possessed only a summary view of the reorganisation initiative, little knowledge of its impact beyond neighbouring schools, but detailed awareness of what lay within their first hand experience.

Fifth, complex educational change is *contextually dependent*, facilitated and constrained by many aspects of the wider political and historical milieu with which it interacts. The change will *interact with an evolving profile of other planned and unplanned changes*. In a climate of central government public sector reform, abundant policy initiatives under way at any time are likely to impinge on each other. All school staff had to implement education reforms of the day alongside reorganisation, and were subject to the wider central government imperative of making efficiency gains in public sector expenditure. Governors and parents in two case study schools took advantage of the contradictory central government policy promoting escape from LEA control by doing just that to avoid their fate under reorganisation proposals, so shoring up surplus capacity in their locality.

The *impact of the accretion of past changes affecting resource parameters* for the change may be facilitative or inhibitory. The imperative to downsize provision in both LEAs was a direct consequence of past expansion at a time of population growth. The legacy of surplus capacity following recent population decline had contributed to a level of public expenditure that, in a harsher economic climate of global competition, was now deemed excessive.

Complexity and Change Management Themes

The characteristics of complexity exhibited by the LEA reorganisation initiatives reveal underlying patterns suggesting that complexity need not imply impenetrability. They are unlikely to be exhaustive for reorganisation, and almost certainly do not cover all forms of complex change in large education systems. Yet they appear sufficiently general to have some applicability to other complex changes in different situations, after allowing for the context-specificity of reorganisation in the England of the mid 1990s. They point to multiple forms of differentiation between the parts of the complex change as an entity, and to intrinsic reciprocal links between this change and the evolving context in which it occurs. Acting in combination, the characteristics of complexity have profound implications for the management of change, as Table 4 suggests.

Table 4: Indicative implications of complexity for change management themes

Characteristics of complexity	*Change management themes*			
	Metatask of orchestration	*Flexible planning and coordination*	*Culture building and communication*	*Differentiated support*
large-scale	establishing multiple communication links, identifying stakeholders' interests and minimising potential resistance	planning to ensure expertise is available where and when needed, planning to minimise resistance and maximise support	articulating a vision for change through diverse communication strategies, ensuring that coherent messages are disseminated	identifying the range of existing expertise and facilitating its use to support others
componential	establishing interrelated structures and responsibilities to cover all components	lock-step planning for multiple and sequential components, frequent updating of plans where later components are affected by earlier ones	ensuring that change components are as consistent with the vision as possible, facilitating communication between those responsible for different components	ensuring that the content of support strategies covers the range of components and their interrelationship
systemic	establishing and monitoring the effectiveness of cross-level linkages, seeking a confluence of interests between stakeholders	facilitating coordination of planning between system levels by gathering and disseminating information between levels	maximising cross-level support by nurturing a culture of acceptance and endorsement of change, encouraging frequent updating of information between levels	designing support strategies for those involved at different levels, facilitating cross-level support
differentially impacting	monitoring the evolution of the range of impacts and taking responsive action where necessary	predictive and responsive planning to take account of varied impacts and their evolution over time	targeting strategies to promote a culture of acceptance on those with greatest power to resist, inviting and acting on feedback	identifying the diversity of evolving needs and designing and updating a range of support strategies to meet them
context dependent	predicting and monitoring the impact of other policies and changes and assimilating them, seeking to maximise resources within available limits	taking account of the cumulative impact of early outcomes on subsequent plans, adjusting plans incrementally where other policies and changes impact	monitoring the evolving balance between allegiance to the status quo and to change among different stakeholder groups	monitoring and adjusting support strategies to ensure that diverse needs are met, designing support strategies within resource parameters

Analysis of patterns across the multiplicity of tasks entailed in managing each stage of the LEA reorganisation initiatives suggested four broad change management themes. All five characteristics of complexity contributed to the highly differentiated and extensively but unequally distributed activity within each change management theme.

These themes were hierarchically ordered in the sense that the *metatask of orchestration* was the hub of the most strategic activity undertaken by those in formal positions giving them the requisite authority through which the other three more detailed change management themes were steered. It fell to the CEO and a small group of senior officials and senior councillors at LEA level at the initiation stage, prompted and approved by central government ministers and senior civil servants and the legislative and financial framework setting parameters for reorganisation. From the point of beginning to prepare for implementation, orchestration was shared across administrative levels with the headteacher or headteacher designate, a small group of senior staff in larger institutions, and the chair of governors in each school. From the date of reorganisation, it became the exclusive province of the latter group throughout the institutionalisation stage. Orchestration included instigating change management activity, creating and sustaining favourable conditions for the change to happen, setting up management structures and delegating responsibilities, monitoring progress and taking corrective or adaptive action where necessary and feasible to keep the change process on track.

The intricate and componential nature of reorganisation meant that even orchestrators could not escape coping with some ambiguity. There were so many factors whose combined interaction was beyond any individual's understanding, let alone control, that no-one' s overview could be fully comprehensive despite constant monitoring. Other characteristics of complexity shaped orchestration activity, as where the large number of people affected meant that multidirectional channels of communication must be forged between them.

Orchestration guided activity under the other three change management themes, many requiring specialist expertise and so much more widely distributed within and between administrative levels. *Flexible planning and coordination* involved thinking through what needed to be done at LEA and school levels for the initiatives as a whole and for each stage, taking account of contextual parameters like the incentive to borrow from central government to finance desirable building and refurbishment, and the interrelationship between plans. The approach to planning reflected the tension between retaining flexibility, as in an evolutionary approach (Louis and Miles 1990) and retaining overall coherence through longer-term cycles, as in more traditional approaches like strategic planning (Steiner 1979). It conformed to the notion of 'flexible planning' for change in a relatively turbulent environment put forward by Wallace and McMahon (1994). Planning connected with reorganisation was a medium-term predictive process for the change as a whole, for one or more phases and for the stages of the process, updated year on year as dictated by the annual financial planning cycle. It was also highly incremental, as planners responded to new information about progress and spasmodically and often unpredictably occurring factors such as a delay in central government decisions on submitted proposals on phases 2 and 3 in the county. At school level, bad weather frequently delayed completion of building work towards the end of the implementation stage, necessitating adjustment of plans for moving into the new accommodation. Coping with this tension meant that, at heart, planning was a more or less continual process of creation, monitoring and adjustment within the broad longer-term thrust.

The characteristics of complexity similarly shaped the distribution of planning activity and its content. For example, plans had to be made and coordinated for the multiplicity of interrelated components differentially affecting schools and the people connected with them, coupled with ensuring that the necessary diversity of expertise would be available to deal with each component. Planning for implementation had to be coordinated closely between LEA officials and school staff since much preparation for reorganisation was a cross-level affair. Officials were much exercised during the implementation stage with trying to ensure that all displaced staff from closing schools gained redeployment in surviving schools or premature retirement, entailing much prompting of headteachers and governors to create or reconfigure the staffing structure and appoint the staff needed for their school.

The heavy emphasis on *culture building and communication* throughout the change process was deeply affected by all the characteristics of complexity. Indicatively, at the initiation and implementation stages the large-scale and systemic characteristics of reorganisation implied that information must be disseminated to a large number of people in school communities and feedback sought from them. Dependence on the acquiescence or endorsement of stakeholders at central government and school levels meant that they must nurture a 'culture of acceptance' by promulgating consistent messages within a vision of the benefits that reorganisation would bring, and also pre-empt any potential resistance. The differential impact of reorganisation proposals on stakeholders' immediate interests meant that officials could capitalise on the favourable culture in expanding high schools, while seeking to gain acceptance elsewhere. Once firm proposals were approved, headteachers and governors were dependent on their colleague staff to carry out implementation tasks alongside their normal work. If renewal was to extend as far as improvement efforts directed towards shared goals, headteachers were dependent on their staff pulling together during the institutionalisation stage. The differential impact of reorganisation on individual staff members in schools that were a product of merger meant that the staff culture was fragmented when merged institutions opened, so headteachers and their senior colleagues worked hard to promote a new school-wide professional culture embracing improvement consistent with headteachers' educational values.

An enormous amount of *differentiated support* had to be provided for the people who needed it and at the right time. Forms of support spanned provision of expertise, finance and physical resources like new building, training and individual counselling. Characteristics of complexity had a profound impact on the way this variety of provision was managed. Let us take two instances. The context dependent character of support followed from the fact that the aggregate of past changes, including a previous reorganisation initiative and, over time, cumulative experience with early phases of the present initiatives, had produced the pool of expertise among officials. A mixture of central government and LEA policies facilitated and constrained what could be done. The differential impact of the proposals for stakeholders affected meant that the needs identification process and provision of support strategies, such as preparatory briefing and training, had to be updated during each stage of reorganisation. By the time institutionalisation of the final phase had proceeded for a year or so, the focus of officials' support had turned from reorganisation as such towards school improvement in the post-reorganisation context.

Towards More Sophisticated Evidence-Informed Guidance

To conclude, the research indicates how patterns were detectable in the complexity of the reorganisation initiatives and the school renewal efforts that flowed from them with practical

implications for managers, despite their dynamic complexity. Analysing just what it is that makes managing complex change so complex appears promising as a precursor for developing more general evidence-backed guidance. However, it is equally clear that such advice can be only at quite a high level of abstraction since complex educational changes are self-evidently diverse in their details, whether in terms of their educational content or the education system in which they are embedded. They are most certainly context-sensitive, especially in respect of the legacy of past changes and the impact of other policies.

Research on a single instance of complex educational change is just as self-evidently no more than a starting point for understanding of what, by definition, is a multifaceted phenomenon whose forms of expression are diverse. Further work is needed on different complex educational changes in different contexts to test how far the characteristics, their constituents and the implications for managing complex educational change identified here do have wider applicability and how far they would bear further elaboration and refinement. It may be ambitious to aim to develop a stronger empirical basis for practical guidance on strategies for managing complex educational change of diverse content in equally diverse national and cultural contexts. But it is surely not a viable option to continue relying on prescriptions born of yesterday's context when educational change was a simpler undertaking. Arguably such prescriptions are fast achieving the dubious status of slogans, out of touch with the reality of complex educational change that practitioners are struggling to manage. If we are serious about promoting systemic school renewal, we must be equally serious about understanding and developing realistic guidance on managing the complexity of change that renewal initiatives on a grand scale imply.

Acknowledgement

Keith Pocklington conducted fieldwork for one LEA and contributed to the analysis of data for both LEAs investigated in the research.

References

Chambers, W and R Ltd (1998) *The Chambers Dictionary*, Edinburgh: Chambers Harrap

Department for Education (1994) *Circular on the Supply of School Places* Circular 23/94, London: Department for Education

Department of Education and Science (1992) *Choice and Diversity: A new framework for schools*, Cm 2021 London: HMSO

Fullan, M (1993) *Change Forces: Probing the Depths of Educational Reform*, London: Falmer

Fullan, M (1999) *Change Forces: The Sequel*, London: Falmer

Fullan, M with Stiegelbauer, S (1991) *The New Meaning of Educational Change*, London: Cassell

Louis, K S and Miles, M (1990) *Improving the Urban High School: What Works and Why* New York: Teachers College Press

Merriam, S (1988) *Case Study Research in Education*, London: Jossey-Bass

Miles, M and Huberman, M (1994) *Qualitative Data Analysis* (2nd edn), London: Sage

Osborne, D and Gaebler, T (1992) *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector* Reading, MA: Addison-Wesley

Steiner, G (1979) *Strategic Planning: What Every Manager Must Know* New York: Free Press

Wallace, M. (1991a) Contradictory interests in policy implementation: the case of LEA development plans for schools, *Journal of Education Policy* 6, 4: 385-99

Wallace (1991b) Coping with multiple innovations: an exploratory study, *School Organisation* 11, 2: 187-209

Wallace, M (1996a) A crisis of identity: school merger and cultural transition, *British Educational Research Journal* 22, 4: 459-472

Wallace, M (1996b) Policy interaction and policy implementation: a case of school merger under duress, *Educational Management and Administration* 24, 3: 263-275

Wallace, M (2000) Integrating cultural and political theoretical perspectives: the case of school restructuring in England *Educational Administration Quarterly* 36, 4: 608-632

Wallace, M and McMahon, A (1994) *Planning for Change in Turbulent Times: The Case of Multiracial Primary Schools* London: Cassell

Wallace, M and Pocklington, K (1998) Large scale reorganisation: a route to school improvement? *School Effectiveness and School Improvement* 9, 4: 349-357

World Bank (2000) *Entering the 21st Century: World development Report 1999/2000* Washington DC: Oxford University Press